## On the Parasites of Odontota Suturalis.

## By L. O. HOWARD.

I publish this short note on the parasites of *Odontota Suturalis* at the request of Dr. Riley, who has recently made an exhaustive study of the habits and life history of this interesting leaf-mining Coleopter, and who wishes to refer to the parasites specifically in his paper without the necessity of cumbering it with descriptive matter. He has bred four species, all of which issued in July.

1. Spilochalcis odontotae, m. This is strikingly handsome species, looking like a dwarfed specimen of *S. mariæ* (Riley.) It was described by the writer together with other species of the genus in Bulletin 5 of the Division of Entomology. It issues from the pupa of the Odontota the latter part of July.

2. Symplezus uroplatae, n. sp. Male, -- Length 2.61 mm. Expanse 4.6 mm. Flagellar joints of the antennæ distinct and somewhat flattened. Whole of pro- and mesonotum strongly shagreened. Median carina of metascutellum delicate, straight and clearly defined. Abdomen ovate. Hind coxæ coarsely shagreened above. Color metallic green; scape yellowish beneath; front femora brownish at base, distal half honey yellow, tibiæ and tarsi nearly white; middle and hind femora brownish, slightly metallic above, tibiæ and tarsi nearly white with the exception of a brownish tinge near base of hind tibiæ. Wing veins dusky; stigmal more delicate than with other species.

Described from 1  $\mathcal{J}$ , bred from mine of *Odontota* (*Uroplata*) suturalis, July 24, 1884 at Washington, D. C. The larva of the *Symplezus* was observed on opening the mine, to feed externally on the larva of the *Onodontota*.

3. Trichogramma odontotae, n. sp. Female. — Length 0.55 mm., expanse 1.12 mm. Color: eyes red, head, antennæ, thorax and basal joint of abdomen orange yellow, all legs light fuscous, remainder of abdomen light brown. Antennæ except scape and including pedicel with a few short sparse hairs. Basal portion of fore wing included by stigmatal vein slightly fuscous, remainder hyaline.

Male.—Length averages about .05 to .1 mm., shorter than  $\bigcirc$ , with wings of about the same proportionate length. Colors the same except that the abdomen is darker, and the fuscous patch on the base of the fore wings is more pronounced. In balsam-mounted specimens no complete division of the flagellum into joints can be observed and the antennæ appear 3-jointed (scape I, pedicel 2, flagellum 3). Conspicuous whorls of hair are present, however, indicating possible sub-divisions. The appearence is much like that of the  $\bigcirc$  antennæ of *Tr. erosicornis*, Westw. (Trans. Linn. Soc. Lond. Ser. 2, Vol. I. (1878) Pl. 73, figs. 24 & 25) for which Westwood erects the sub-genus *Aprobosca*.

Described from  $\mathcal{J}$  and  $\mathcal{Q}$  specimens bred during the month of July from the egg masses of *Odontota suluralis* on Locust at Washington, D. C.

4. Derostenus (Closterocerus) sp. A number of the brilliant little species of this genus have been bred in this country from the leaf mines of both lepidopterous and coleopterous larvæ. None have ever been described and as they are very difficult of separation and approach very closely to the European species, I shall not undertake to publish an isolated species. A study of the American *Entedoninæ* will, of course,

ENTOMOLOGICA AMERICANA.

be made in time, and meanwhile this species may be referred to by the manuscript name Derostenus primus.

The fact that a species of this genus has been bred from the pupa of Eulophus would seem to indicate that Derostenus may consist of secondary parasites and that this species may have fed in the larva state on the larvae or pupae of the Spilochalcis or the Sympiezus.

## -----Notes and News.

It seems that Mr. W. H. Edwards has not yet forgiven Dr. Hagen for his article on Colias. Having on several occasions attempted to dispute Dr. Hagen's conclusions by bringing out prominently the differences between the species-thus showing how minute and evanescent they really are—he now makes his attack in a different way and in ' Papilio" IV, pp. 167-171, with great display of logic and fat type, undertakes to prove that Dr. Hagen for the sake of annihilating several innocent species of Colias, did wilfully, and with malice prepense, manufacture, invent, and as truths publish, certain facts which had no existence. In other word sthat Dr. Hagen wilfully lied to prove the identity of two species of Colias. Of course such charges require no answer from Dr. Hagen. No one believes them and they therefore do no harm. Still to show that Mr. Edwards has either withheld evidence he had knowledge of, or did not inquire far enough before making so grave a charge, the following is published.

"Dear Mr. Henshaw:

You probably have "Papilio" IV, No. 9 and 10. Will vou please read the article 'On some Historical Errors' on p. 167, and give me any information you may have, in reference to the matters there stated as facts. I am especially desirous of learning about those insects caught in copula. Mr. Stretch says he did not catch them; did you? What are the facts about that unfortunate cyanide bottle? Please correct any other errors you may know of in the article, and let me have your reply at as early a date as possible.

Very truly,

Dear Sir:

A number of the statements in the paper "On some historical errors" (Papilio 1884! [1885] v. 4, p. 167-171) by Mr. W. H. Edwards require correction.

Dr. Hagen's statement, that six pairs of Colias were taken in copulation, is correct. Many envelopes, as Mr. Stretch writes, contained more than a single specimen frequently of widely separated genera, but in no case were specimens labelled as collected in copulation unless so

John B. Smith."